Network Video Recorder Quick Start Guide

Applies to A/L/S series only

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Welcome

Thank you for purchasing our network video recorder!

This quick start guide is designed to be a reference tool for your system.

Please open the accessory bag to check the items one by one in accordance with the list below. Contact your local retailer ASAP if something is missing or damaged in the bag.

Before your operation please read the following instructions carefully.

- **Installation environment**

✧ Keep away from extreme hot places and sources；

✧ Avoid direct sunlight；

✧ Keep away from extreme humid places；

✧ Avoid violent vibration；

✧ Do not put other devices on the top of the NVR；

✧ Be installed in well ventilated place; do not block the vent.

- **Accessories**

Check the following accessories after opening the box：

- **Please refer to the packing list in the box ***

Component Name	A Series	L/S Series	Quantity
NVR	■	■	1
7-pin SATA cable	■	■	1
Power cable	■	■	1
Network cable	■	■	1
Remote control	□	■	1
Black optical mouse	■	■	1
Power adapter	■	□	1
Quick start guide	■	■	1
Product warranty card	■	■	1
Product certificate card	■	■	1

CD	■	■	1
Plastic pad	■	■	4

Important

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

We are not liable for any problems caused by unauthorized modifications or attempted repair.

1 Front Panel and Rear Panel

1.1 Front Panel

1.1.1 A Series

The A series NVR front panel is shown as below. See Figure 1-1.

Figure 1-1

Please refer to the following sheet for detail information.

Icon	Name
	Power button
	Power status indication light
	Alarm status indication light
	Network status indication light
	HDD status indication light
1～16	Record status indication light

1.1.2 L Series

The L series NVR front panel is shown as in Figure 1-2.

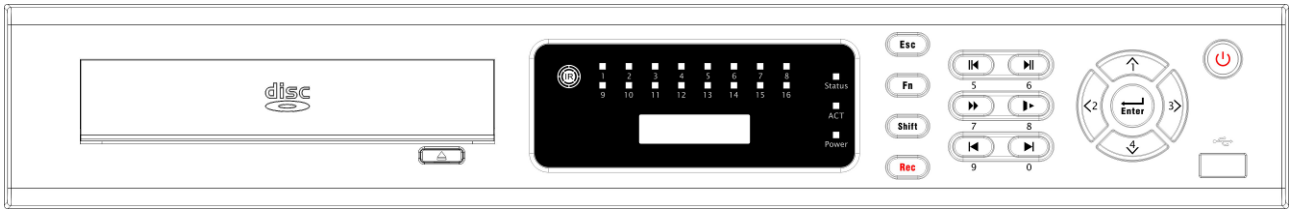

Figure 1-2

Please refer to the following sheet for detail information.

Icon	Name	Function
	CD-ROM	Pop-up or put in the CD-ROM
IR	IR remote control receive port	It is to receive the IR signal from the remote control.

Icon	Name	Function
1～16	Record status indication light	When there is a channel is recording, the corresponding light becomes green.
Status	System running status indication light	The light becomes red when system is running properly.
ACT	Remote control key indication light	The light becomes red when the remote control address and the device address is the same. The red light becomes flash when you press the key in the remote control.
Power	Power status indication light	The light becomes red when the power connection is OK.
Esc	Cancel	Go to previous menu, or cancel current operation. When playback, click it to restore real-time monitor mode.
Fn	Auxiliary button	One-window monitor mode, click this button to display assistant function: PTZ control and image color.
		After you entered the PTZ control interface, click it to switch PTZ control menu.
		Backspace function: in numeral control or text control, press it for 1.5seconds to delete the previous character before the cursor.
		In motion detection setup, working with Fn and direction keys to realize setup.
		In HDD information interface, click it to view HDD record time and other information (menu prompt)
		Realize other special functions.
Shift	Switch	In textbox, click this button to switch between numeral, English(Small/Capitalized),donation and etc.
Rec	Record	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.
⏮	Reverse/Pause/6	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback. In text mode, input number 6 (English character M/N/O)
⏯	Play/Pause /5	In normal playback click this button to pause playback In pause mode, click this button to resume playback. In text mode, input number 5(English character J/K/L).
⏩	Fast play/7	Various fast speeds and normal playback. In text mode, input number 7 (English character P/Q/R/S).

Icon	Name	Function	
	Slow play/8	Multiple slow play speeds or normal playback. In text mode, input number 8 (English character T/U/V).	
	Play previous/0	In playback mode, playback the previous video In text mode, input number 0.	
	Play Next/9	In playback mode, playback the next video In text mode, input number 9 (English character W/X/Y/Z)	
	Up/1	Shift current activated control, jumping to up/down/left/right.	Increase/decrease numeral. Assistant function such as PTZ menu. In text mode, input number 1/4 (English character G/H/I)
	Down /4		
	Left /2		When playback, click these buttons to control playback bar. In text mode, input number 2(English character A/B/C) /3(English character D/E/F)
	Right /3		
Enter	Confirm	Confirm current operation Go to default button Go to menu	
	Power	Power button, press this button to boot up or shut down NVR.	
	USB port	To connect USB storage device, USB mouse.	

1.1.3 S Series

The S series NVR front panel is shown as in Figure 1-3.

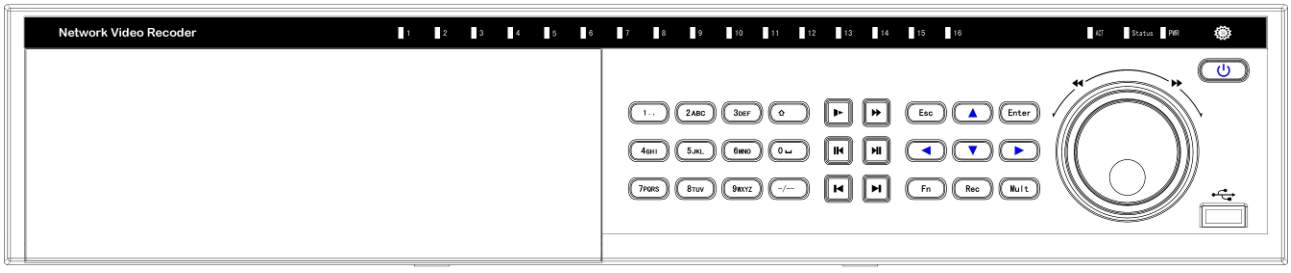

Figure 1-3

Please refer to the following sheet for detail information.

Icon	Name	Function
1～16	Record status indication light	When there is a recording channel, the corresponding light becomes green.
ACT	Remote control key indication light	The light becomes red when the device receives the IR signal from the remote control.

Icon	Name	Function
Status	System running status indication light	The light becomes red when system is running properly.
PWR	Power status indication light	The light becomes red when the power connection is OK.
IR	IR remote control receive port	It is to receive the IR signal from the remote control.
	Number 0 to 9.	Input number or switch the channel.
	For number more than 10	When you channel number is more than 9, please click this button and then input the number you desire.
	Shuttle(outer ring)	In real-time monitor mode it works as left/right direction key. Playback mode, counter clockwise to forward and clock wise to backward
	Jog(inner dial)	Up/down direction key. Playback mode, turn the inner dial to realized frame frame playback. (Only applies to some versions.)
	Slow play/8	Multiple slow play speeds or normal playback. In text mode, input number 8 (English character T/U/V).

Icon	Name	Function
▶▶	Fast play/7	Various fast speeds and normal playback. In text mode, input number 7 (English character P/Q/R/S).
⏮	Reverse/Pause/6	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback. In text mode, input number 6 (English character M/N/O)
⏯	Play/Pause /5	In normal playback click this button to pause playback In pause mode, click this button to resume playback. In text mode, input number 5(English character J/K/L).
⏮	Play previous/0	In playback mode, playback the previous video In text mode, input number 0.
⏭	Play Next/9	In playback mode, playback the next video In text mode, input number 9 (English character W/X/Y/Z)
Esc	Cancel	Go to previous menu, or cancel current operation. When playback, click it to restore real-time monitor mode.
Enter	Confirm	Confirm current operation Go to default button Go to menu
Fn	Auxiliary button	One-window monitor mode, click this button to display assistant function: PTZ control and image color.
		After you entered the PTZ control interface, click it to switch PTZ control menu.
		Backspace function: in numeral control or text control, press it for 1.5seconds to delete the previous character before the cursor.
		In motion detection setup, working with Fn and direction keys to realize setup.
		In HDD information interface, click it to view HDD record time and other information (menu prompt)
		Realize other special functions.
Rec	Record	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.
Mult	Window switch	Switch monitor window to single-window or multiple-window.

Icon	Name	Function	
▲	Up/1	Shift current activated control, jumping to up/down/left/right.	Increase/decrease numeral. Assistant function such as PTZ menu. In text mode, input number 1/4 (English character G/H/I)
▼	Down/4		
◀	Left/2		When playback, click these buttons to control playback bar. In text mode, input number 2(English character A/B/C) /3(English character D/E/F)
▶	Right/3		
⏻	Power	Power button, press this button to boot up or shut down NVR.	
⇐	USB port	To connect USB storage device, USB mouse.	

1.2 Rear Panel

1.2.1 A Series

The A series NVR real panel is shown as in Figure 1-4.

Figure 1-4

Please refer to the following sheet for detailed information.

Port Name		Connection	Function
⇐	USB port.		Connect to USB mouse.
	Network port		10M/100M self-adaptive Ethernet port. Connect to the network cable.
RS232	232 debug COM.		It is for general COM debug to configure IP address or transfer transparent COM data.
VGA	VGA video output port	VGA	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.

Port Name		Connection	Function
1～16	Alarm input port. 1～16	I/O port	● Four groups of alarm input ports. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). ● When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
⏚	Alarm input port ground end		Alarm input ground end.
NO1～NO3 C1～C3	3-ch alarm output port		• 3 groups of alarm output ports. (Group 1：port NO1～C1,Group 2:port NO2～C2,Group 3:port NO3～C3）).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. • NO：Normal open alarm output port. • C：Alarm output public end.
A	RS485 communication port		RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
B			RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.
DC 12V ⎓	Power port		Input 12V DC.
Power button			Power on/off button.

1.2.2 L Series

The L series rear panel is shown as below. See Figure 1-5.

Figure 1-5

Please refer to the following sheet for detailed information.

Port Name		Connection	Function
Power button			Power on/off button.
Power input port			Input AC 220
MIC OUT	Audio output port	RCA	Audio output port. Output analog audio signal to the devices such as sound box.
MIC IN	Audio input port	RCA	Bidirectional talk input port. Receive the analog signal from the devices such as speaker or pickup.
1～16	Alarm input port. 1～16	I/O port	● Four groups of alarm input ports. The first group is from port 1 to port 4, the second group is from port 5 to port 8, the third group is from 9 to 12, and the fourth group is from 13 to 16. They are to receive the signal from the external alarm source. There are two types; NO (normal open)/NC (normal close). ● When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
⏚	Ground end		Alarm input ground end.
NO1～NO5	Alarm output port 1～5		• 5 groups of alarm output ports. (Group 1：port NO1～C1,Group 2:port NO2～C2,Group 3:port NO3～C3.group 4: port NO4～C4、Group 5：port NO5、C5、NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. • NO：Normal open alarm output port. • C：Alarm output public end. • NC: Normal close alarm output port.
C1～C5			
NC5			
A	RS485 port		RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
B			RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.

Port Name		Connection	Function
CTRL 12V			Controllable 12V power output. It is to control the on-off relay output. You can use it to enable device alarm function. It can also be used as the power input for some alarm devices such as the smoke detector.
+12V			+12V power output port. It is to provide the power to the peripheral devices such as camera or alarm device. The connected device current shall be less than 1A.
	Network port		10M/100M self-adaptive Ethernet port. Connect to the network cable.
eSATA	eSATA port		The external SATA port. It can be connected to the peripheral devices of SATA port. Please pay attention to the HDD jumper when you connect the external HDD.
	USB port.		Connect to USB mouse.
RS232	232 debug COM.		It is for general COM debug to configure IP address or transfer transparent COM data.
HDMI	High definition multimedia interface		High definition video signal output port. Transmit the clear video and multiple-track data (Uncompressed)to the device of HDMI(High definition media interface)
VGA	VGA video output port	VGA	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
Power button			Power on/off button

1.2.3 S Series

The S series NVR rear panel is shown as in Figure 1-6.

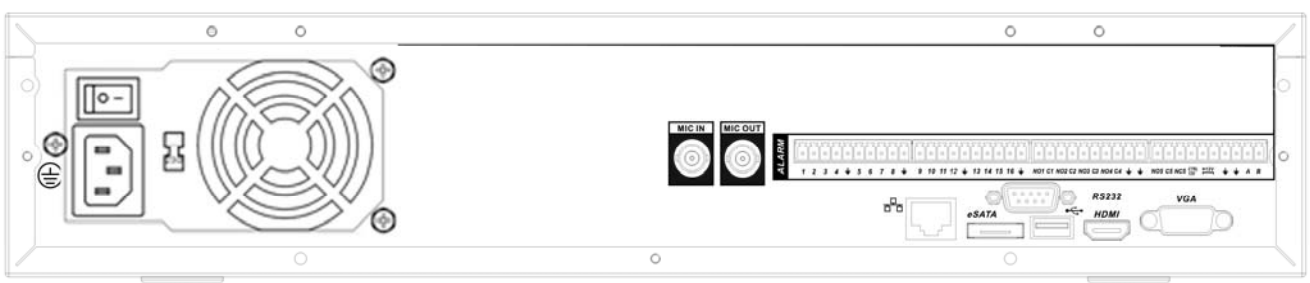

Figure 1-6

Please refer to the following sheet for detailed information.

Port Name		Connection	Function
Power button			Power on/off button.
Power input port			Input AC 220
MIC OUT	Audio output port	RCA	Audio output port. Output analog audio signal to the devices such as sound box.
MIC IN	Audio input port	RCA	Bidirectional talk input port. Receive the analog signal from the devices such as speaker or pickup.
1～16	Alarm input port.	I/O port	• 4 groups of alarm output ports. (Group 1：port 1～4,Group 2：Port 5～8，Group 3：port 9～12，Group 4：port 13～16).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. • When your alarm input device is using external power, please make sure the device and the NVR have the same ground.
⏚	Alarm input port ground end		• Alarm input ground end.
NO1 to NO5	Alarm output port 1～5		• 5 groups of alarm output ports. (Group 1：port NO1～C1,Group 2:port NO2～C2,Group 3:port NO3～C3.group 4 port NO4～C4、Group 5：port NO5、C5、NC5).Output alarm signal to the alarm device. Please make sure there is power to the external alarm device. • NO：Normal open alarm output port. • C：Alarm output public end. • NC: Normal close alarm output port.
C1 to C5			
NC5			
A	RS485 port		RS485_A port. It is the cable A. You can connect to the control devices such as speed dome PTZ.
B			RS485_B.It is the cable B. You can connect to the control devices such as speed dome PTZ.

Port Name		Connection	Function
CTRL 12V			Controllable 12V power output. It is to control the on-off relay output. You can use it to enable device alarm function. It can also be used as the power input for some alarm devices such as the smoke detector.
+12V			+12V power output port. It is to provide the power to the peripheral devices such as camera or alarm device. The connected device current shall be less than 1A.
	Network port		10M/100M self-adaptive Ethernet port. Connect to the network cable.
eSATA	eSATA port		The external SATA port. It can be connected to the peripheral devices of SATA port. Please pay attention to the HDD jumper when you connect the HDD.
	USB port.		Connect to USB mouse.
RS232	232 debug COM.		It is for general COM debug to configure IP address or transfer transparent COM data.
HDMI	High definition multimedia interface		
VGA	VGA video output port	VGA	VGA video output port. Output analog video signal. It can connect to the monitor to view analog video.
Power button			Power on/off button.

2 HDD Installation

2.1 A Series

Pleas follow the steps listed below to install the HDD.

Use the screwdriver to loose the screws in the rear panel and the remove the front cover. See Figure 2-1

Figure 2-1

Place the HDD in accordance with the four holes in the device chassis. See Figure 2-2.

Figure 2-2

After you fix the HDD in the chassis manually, please turn the device and the HDD up for 90 degrees, you can use the screwdriver to fix the four screws in the bottom of the chassis to secure the HDD. See Figure 2-3.

Figure 2-3

After you fix the HDD, please connect the data cable to the main board first and then connect the power cable to the main board. See Figure 2-4.

Figure 2-4

Please put the cover back and then fix the screws in the rear panel. See Figure 2-5.

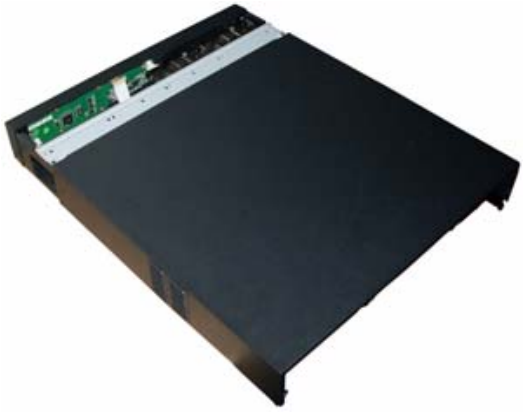

Figure 2-5

2.2 L Series

Use the screwdriver to loose the screws in the rear panel and the side panel, and then remove the front cover. See Figure 2-1

Figure 2-6

Place the HDD on the HDD bracket in accordance with the four holes in the device chassis. Use the

screwdriver to secure the HDD in the HDD bracket. See Figure 2-7.

Figure 2-7

Connect the HDD data cable to the main board and HDD port respectively. Loosen the power cable in the chassis and then connect the power cable to the other port of the HDD. See Figure 2-8.

Figure 2-8

After you fix the HDD, please connect the data cable to the main board first and then connect the power cable to the main board. See Figure 2-9.

Figure 2-9

Please put the cover back and then fix the screws in the rear panel and the side panel. See Figure 2-10.

Figure 2-10

2.3 S Series

Pleas follow the steps listed below to install the HDD.

Use the screwdriver to loose the screws in the rear panel and then remove the front cover. See Figure 2-11.

Figure 2-11

Place the HDD on the HDD bracket in accordance with the four holes in the device chassis. Use the screwdriver to secure the HDD in the HDD bracket. See Figure 2-12.

Figure 2-12

Connect the HDD data cable to the main board and HDD port respectively. Loosen the power cable in the chassis and then connect the power cable to the other port of the HDD. See Figure 2-13.

Figure 2-13

Please put the cover back and then fix the screws in the rear panel. See Figure 2-14.

Figure 2-14

Important

Before you replace the HDD, please make sure you have shut down the device and unplug the power cable!

3 Network Connection

3.1 A Series Connection

Please refer to the following figure for A series connection. See Figure 3-1.

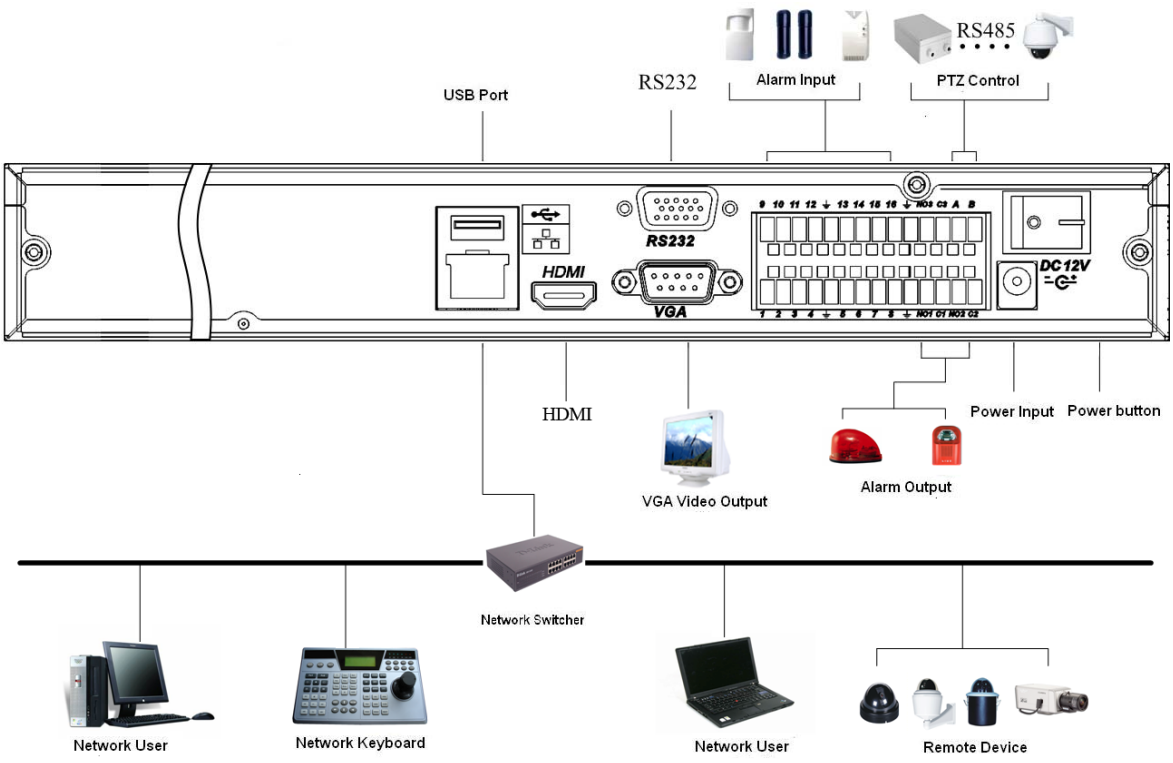

Figure 3-1

3.2 L Series Connection

Please refer to the following figure for L series connection. See Figure 3-2.

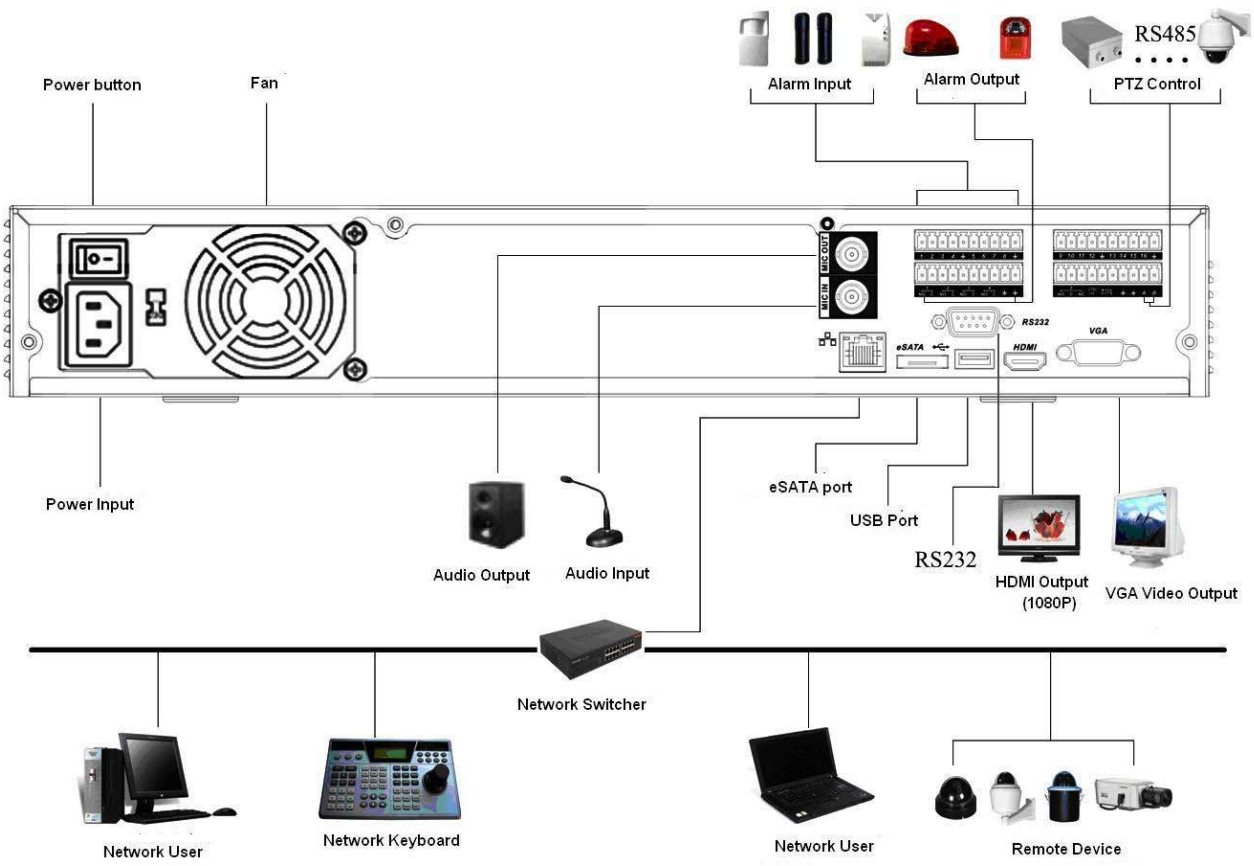

Figure 3-2

3.3 S Series Connection

Please refer to the following figure for S series connection. See Figure 3-3.

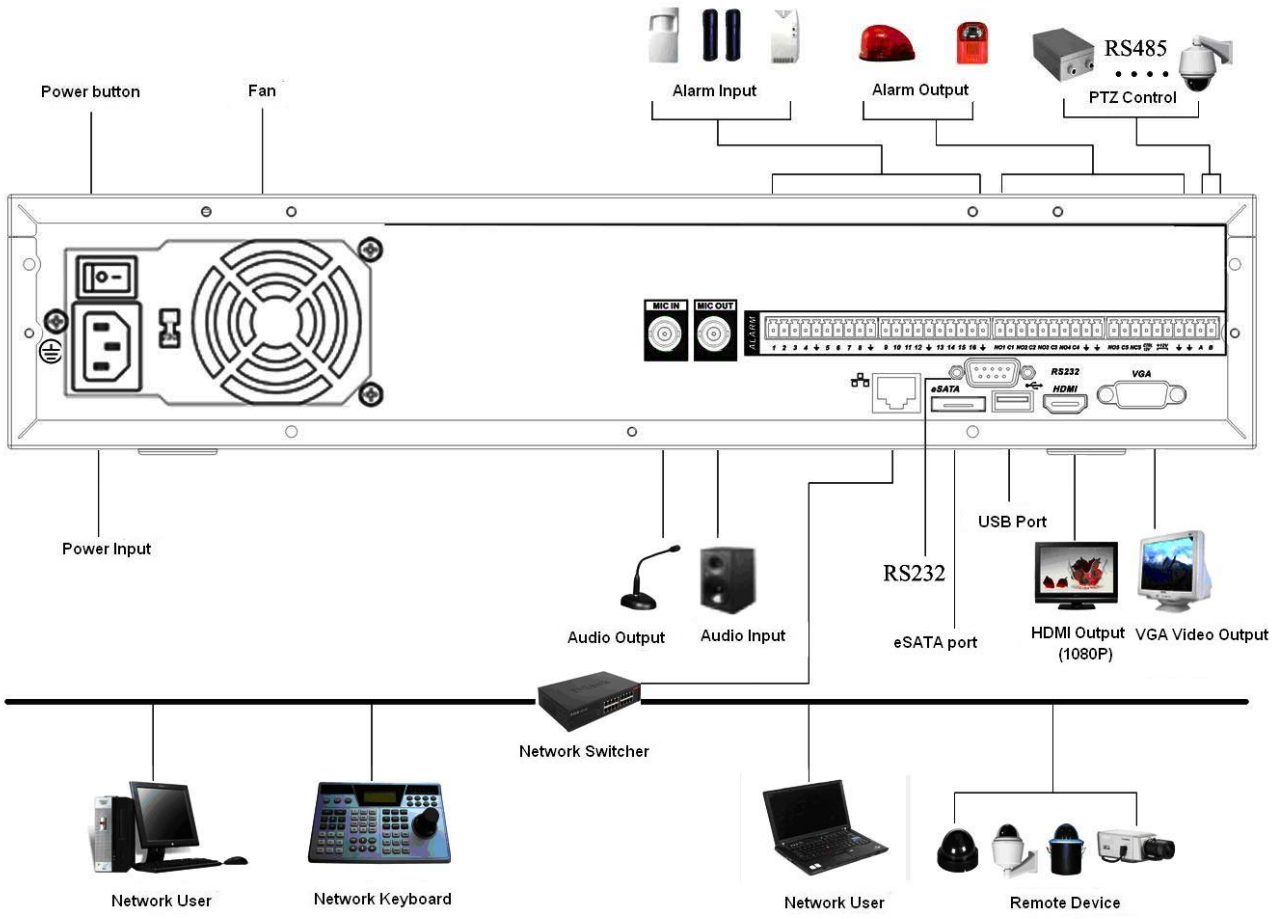
Power button
Fan
Alarm Input
Alarm Output
RS485
PTZ Control
MIC IN
MIC OUT
ALARM
RS232
eSATA
HDMI
VGA
Power Input
Audio Output
Audio Input
RS232
eSATA port
USB Port
HDMI Output
(1080P)
VGA Video Output
Network Switcher
Network User
Network Keyboard
Network User
Remote Device

Figure 3-3

4 GUI Operation

Connect the device to the monitor, insert the mouse and connect the power cable. Push the on/off button in the rear panel and then you can see the analog video output. You can use the mouse to implement some simple GUI operation. Please refer to the following chapter for detail information. All the operations listed below are based on our 16-ch series device.

4.1 Login

After device booted up, the system is in multiple-channel display mode. See Figure 4-1.

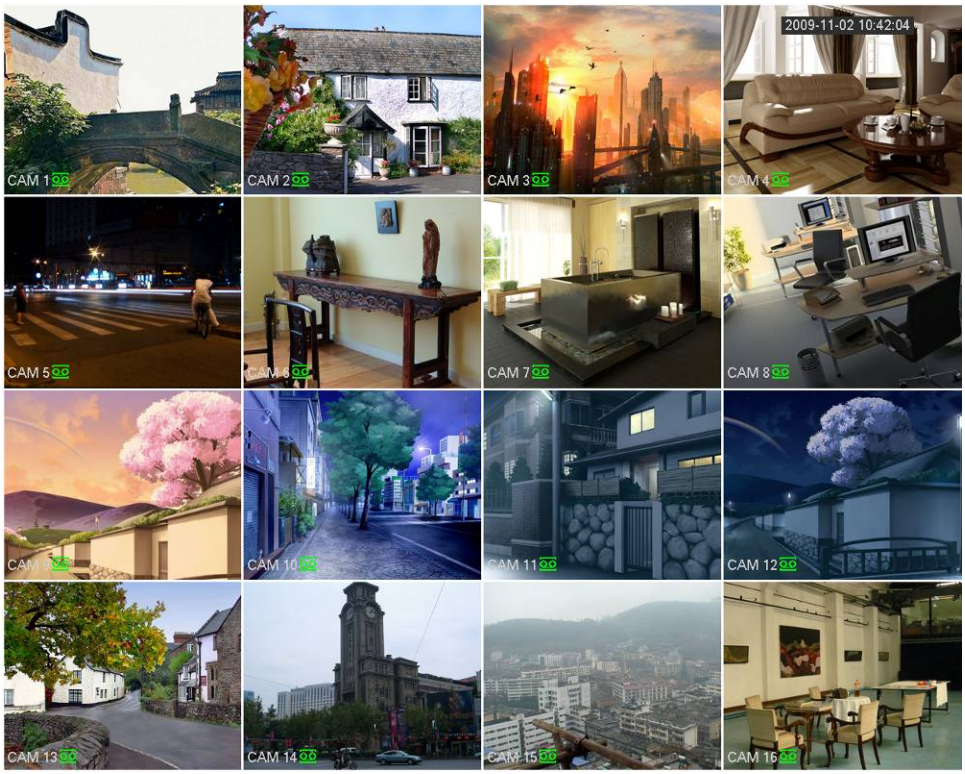

Figure 4-1

Right click mouse, you can see the login interface. Please input user name and password. See Figure 4-2.

Figure 4-2

4.2 Search and Playback

After you logged in the device, right click mouse and then select the search item, you can see the search interface. See Figure 4-3.

Or you can go to the main menu and then select search item; you can go to the following interface too.

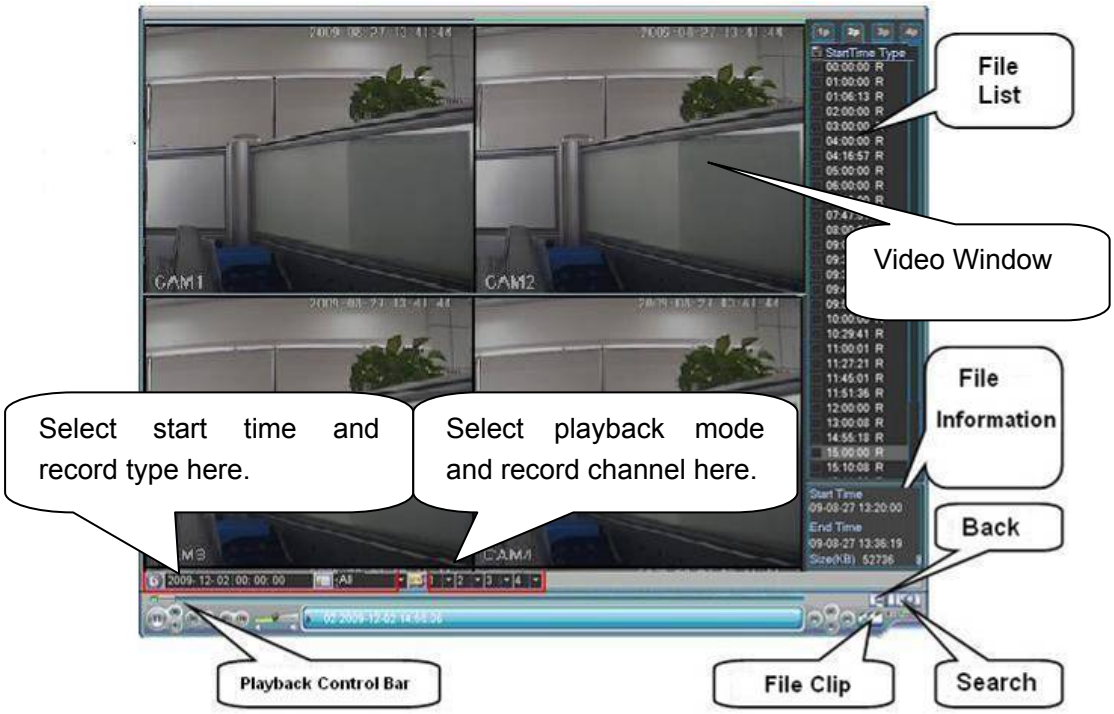

Figure 4-3

Search operation

Please select the start time, type, channel and then click search button; you can view the file list on the right side. System displays the first 100 files by default. You do not need to set the end time.

Playback

Select the file name and double click mouse (or click enter button), you can view file content at your local-end.

Backup

System supports backup operation. You can draw a √ before file name (multiple choices). Then click backup button.

File clip

When a file is playback, you can click the file clip button to begin the edit and then click the file clip button again to end the edit. Now you can click button to save the clipped file as a new file.

Frame by frame manually

When you pause a normal play file, you can click ◀| or |▶ to realize frame by frame play manually.

I frame playback

You can click I to realize I frame file playback.

4.3 Schedule

Manual record interface is shown as in Figure 4-4.

Please make sure you have enabled the schedule function for corresponding channel(s).

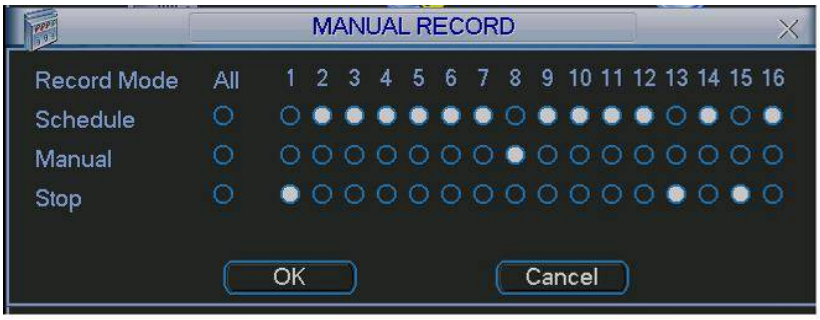

Figure 4-4

Then you can go to Schedule interface. See Figure 4-5.

Please select the record channel number and then set pre-record time, record period. The record type includes: regular record, motion detect record, alarm record. There are max 6 periods in one day.

Redundancy function allows you to record a file in several HDDs to guarantee data security. Please note you need to go to the HDD management interface (Advanced-> HDD Management) to set one HDD as redundancy and then enable redundancy function here.

Playback or search in the redundant disk.

There are two ways for you to playback or search in the redundant disk.

- Set redundant disk(s) as read-only disk or read-write disk (Main menu->Advanced->HDD management).System needs to reboot to get setup activated. Now you can search or playback file in redundant disk.
- Dismantle the disk and play it in another PC.

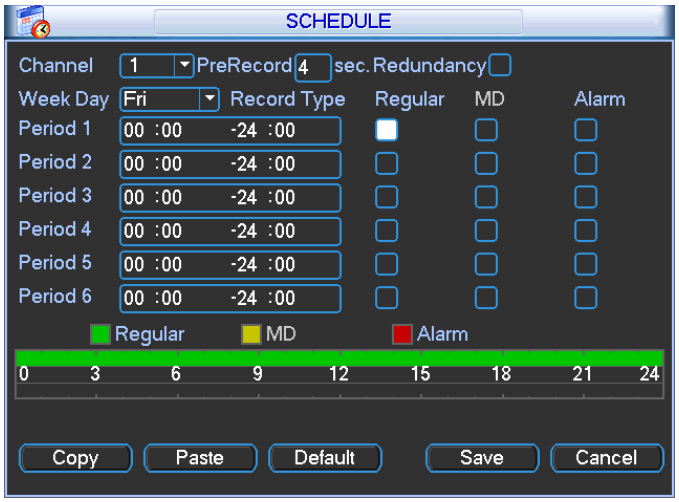

Figure 4-5

4.4 Network Storage

Go to the network setup menu; select the network storage item in the advanced. Network storage interface is shown as below. See Figure 4-6.

Please highlight the FTP item to enable FTP function. And then set the FTP server IP address, port number. And then input the user name and password required to login the FTP.

Now you can upload the local recorded file(s) to the corresponding server.

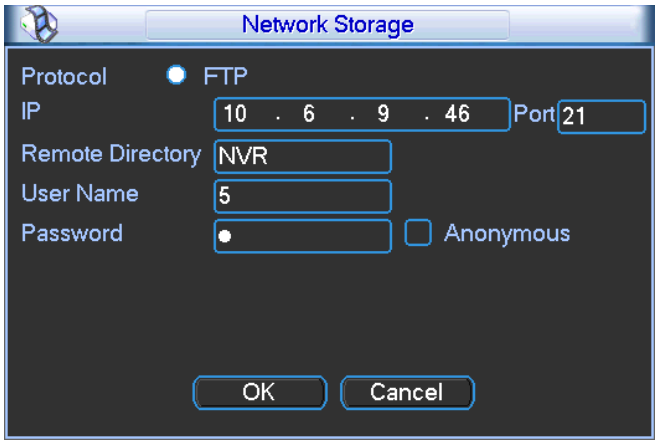

Figure 4-6

4.5 Alarm

Note

Please make sure you have connected the alarm input device and alarm output device to the corresponding input port and output port.

Go to the system setup interface and then select the alarm setup item; you can see the following interface. See Figure 4-7.

Please select the alarm type from the dropdown list. There are two types: local alarm and net alarm. The local alarm is from your local alarm device and net alarm is from the network.

Then you can select the corresponding alarm input port and alarm output port. Select the alarm type (NO/NC) and finally set the alarm period.

Once there is an alarm occurred, system can enable the corresponding channel to record and activate the preset function such as go to preset X, or system can pop up alarm message in the screen, or send out the email to alert you.

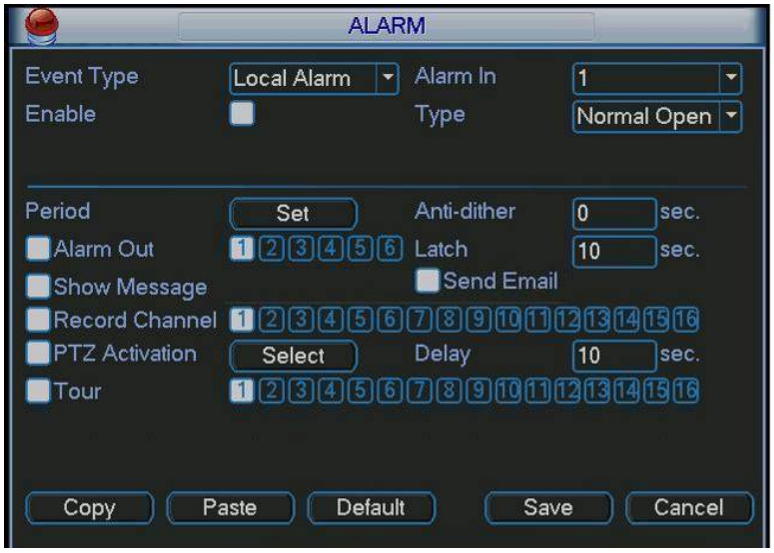

Figure 4-7

4.6 PTZ

Here you can set the following items. See Figure 4-8.

- Channel: Select the current camera channel.
- Protocol: Select corresponding PTZ protocol.
- Address: Default address is 1. Please make sure your setup here is identical with your speed dome address, otherwise you can not control the speed dome!
- Baud rate: Select corresponding baud rate. Default value is 115200.
- Data bits: Select corresponding data bits.
- Stop bits: Select corresponding stop bits.
- Parity: There are three options: odd/even/none.

Figure 4-8

4.7 HDD Management

The HDD management interface is shown as below. See Figure 4-9.

You can select the HDD and then set its property. The types include: read-only, read-write, snapshot, clear all data and etc.

Please note if you set the HDD as partition, current HDD is locked and can not be read or written.

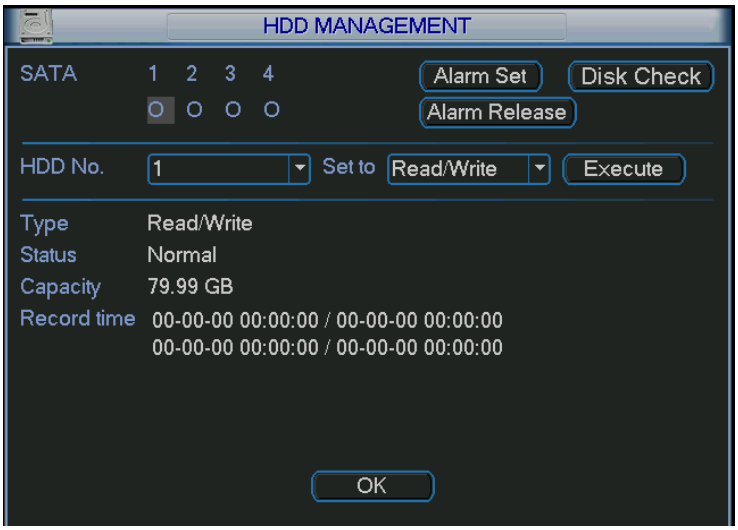

Figure 4-9

4.8 Remote Device

This function allows you to add the remote devices. See Figure 4-10.

Please click the search IP button to view the all remote devices available. Then you can select a channel and then enable its monitor function.

Please input remote device IP address, port number, remote device channel number and account.

When the remote device is high definition device, system max supports 4 devices. The max setup amount is defined by the NVR channel amount.

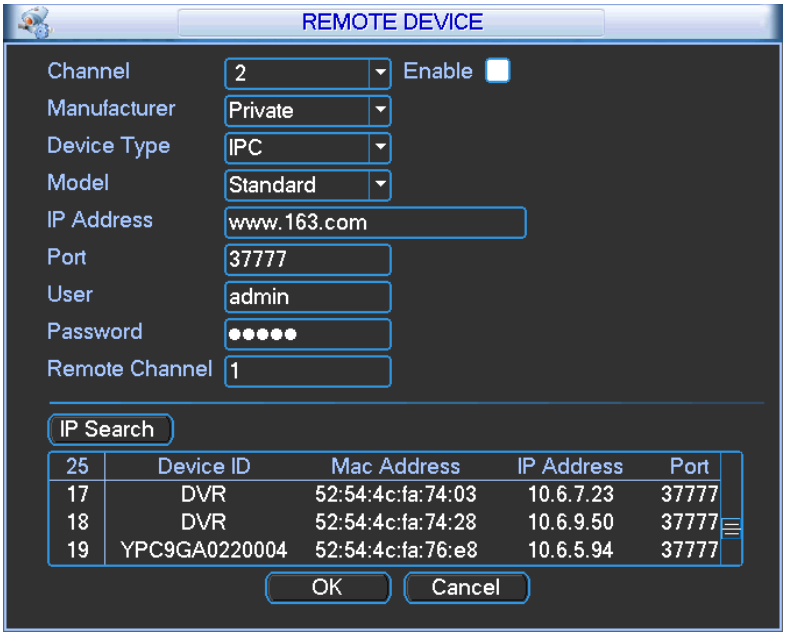

Figure 4-10

5 Quick Configuration Tool

5.1 Overview

Quick configuration tool can search current IP address, modify IP address. At the same time, you can use it to upgrade the device.

Please note the tool only applies to the IP addresses in the same segment.

5.2 Operation

Double click the “ConfigTools.exe” icon, you can see an interface is shown as in Figure 5-1.

In the device list interface, you can view device IP address, port number, subnet mask, default gateway, MAC address and etc.

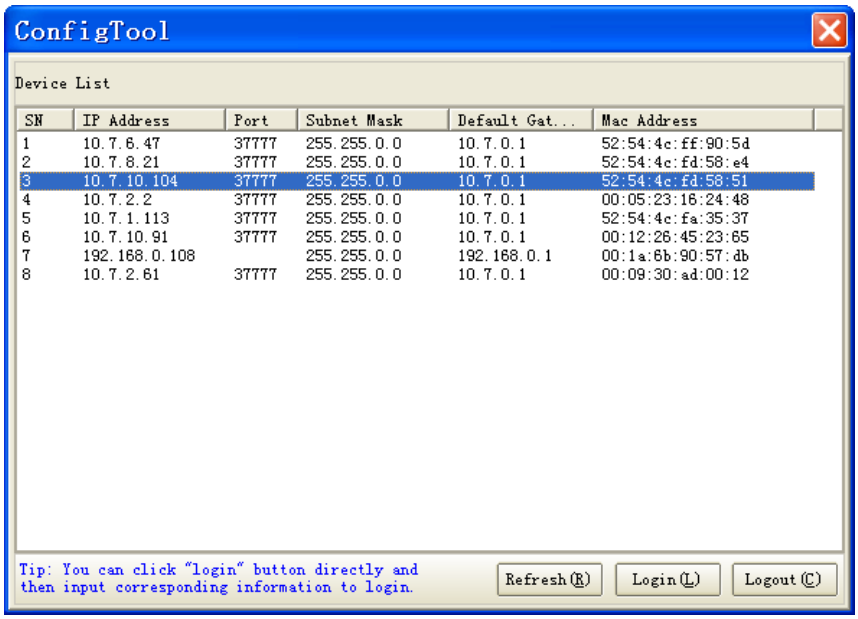

Figure 5-1

Select one IP address and then right click mouse, you can see an interface is shown as in Figure 5-2.

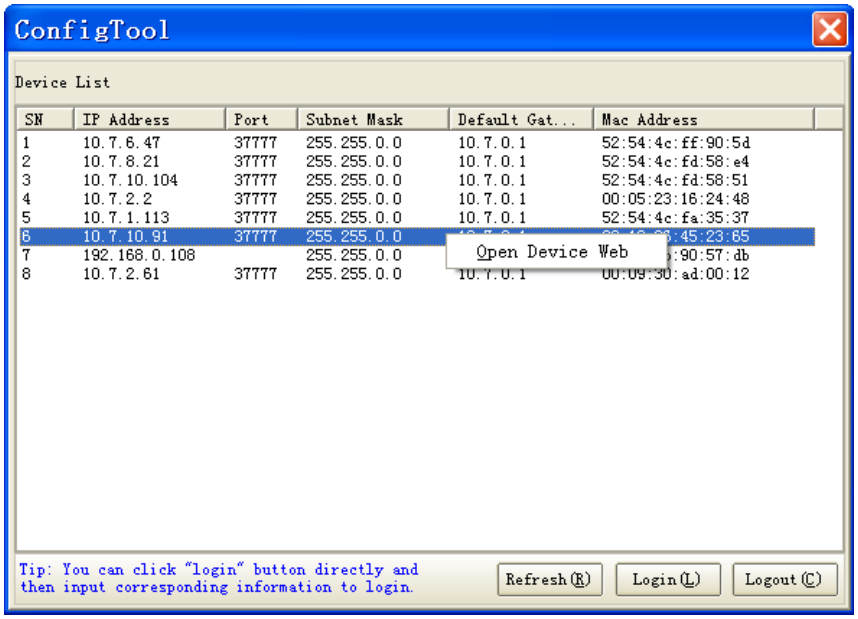

Figure 5-2

Select the “Open Device Web” item; you can go to the corresponding web login interface. See Figure 5-3.

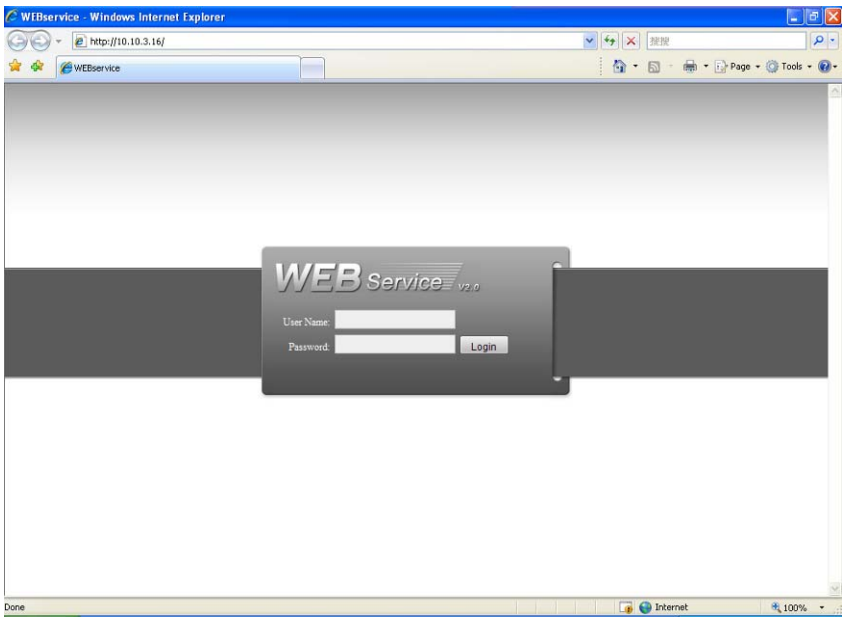

Figure 5-3

If you want to modify the device IP address without logging in the device web interface, you can go to the configuration tool main interface to set.

In the configuration tool search interface (Figure 5-1), please select a device IP address and then double click it to open the login interface. Or you can select an IP address and then click the Login button to go to the login interface. See Figure 5-4.

In Figure 5-4, you can view device IP address, user name, password and port. Please modify the corresponding information to login.

Please note the port information here shall be identical with the port value you set in TCP port in Web Network interface. Otherwise, you can not login the device.

If you are use device background upgrade port 3800 to login, other setups are all invalid.

Figure 5-4

After you logged in, the configuration tool main interface is shown as below. See Figure 5-5.

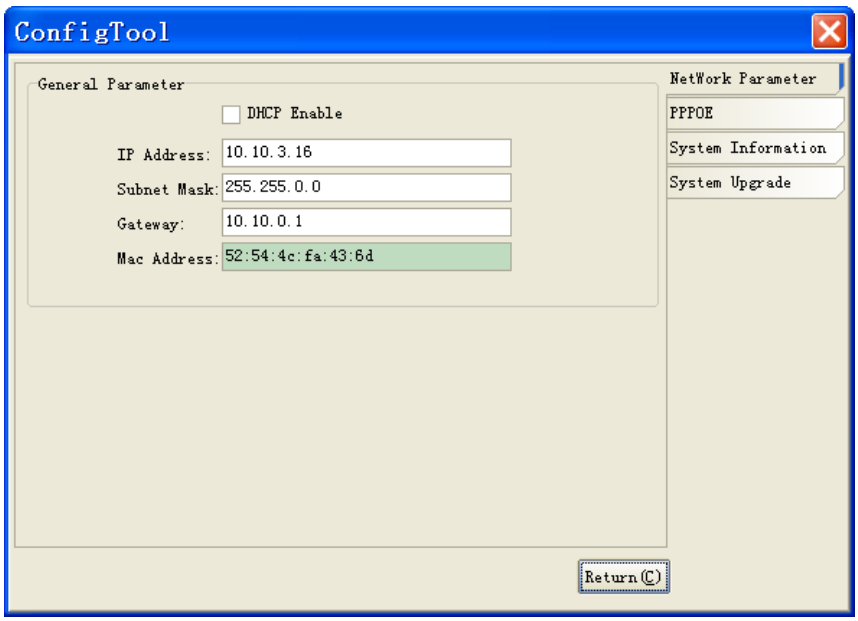

Figure 5-5

Please refer to the *Quick Configuration Tool User's Manual* included in the resources CD for detail information.

6 Web Operation

Before web operation, please check the following items:

- PC and NVR connection is OK.
- You have set PC IP address, NVR IP address, subnet mask and gateway. (Please set the IP address of the same section for the PC and NVR. Please input corresponding gateway and subnet mask if there are routers.) NVR default IP address is 192.168.1.108.
- Use order ping ***.***.***.***(NVR IP address) to check connection is OK or not. Usually the return TTL value should be less than 255.

6.1 Login

Open IE and input NVR IP address in the address column. For example, if your device IP is 192.168.1.108(factory default IP address), then please input http:// 192.168.1.108 in IE address column. See Figure 6-1.

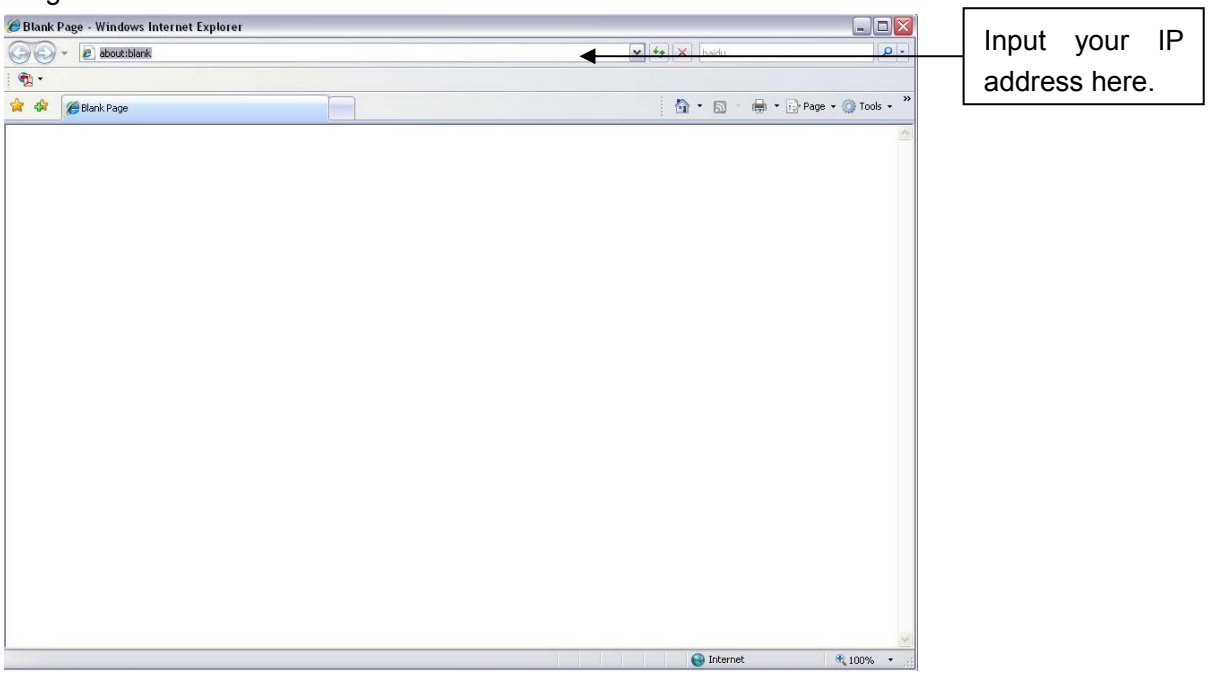

Figure 6-1

System pops up warning information to ask you whether install webrec.cab control or not. Please click yes button.

If you can't download the ActiveX file, please modify your settings as follows. See Figure 6-2.

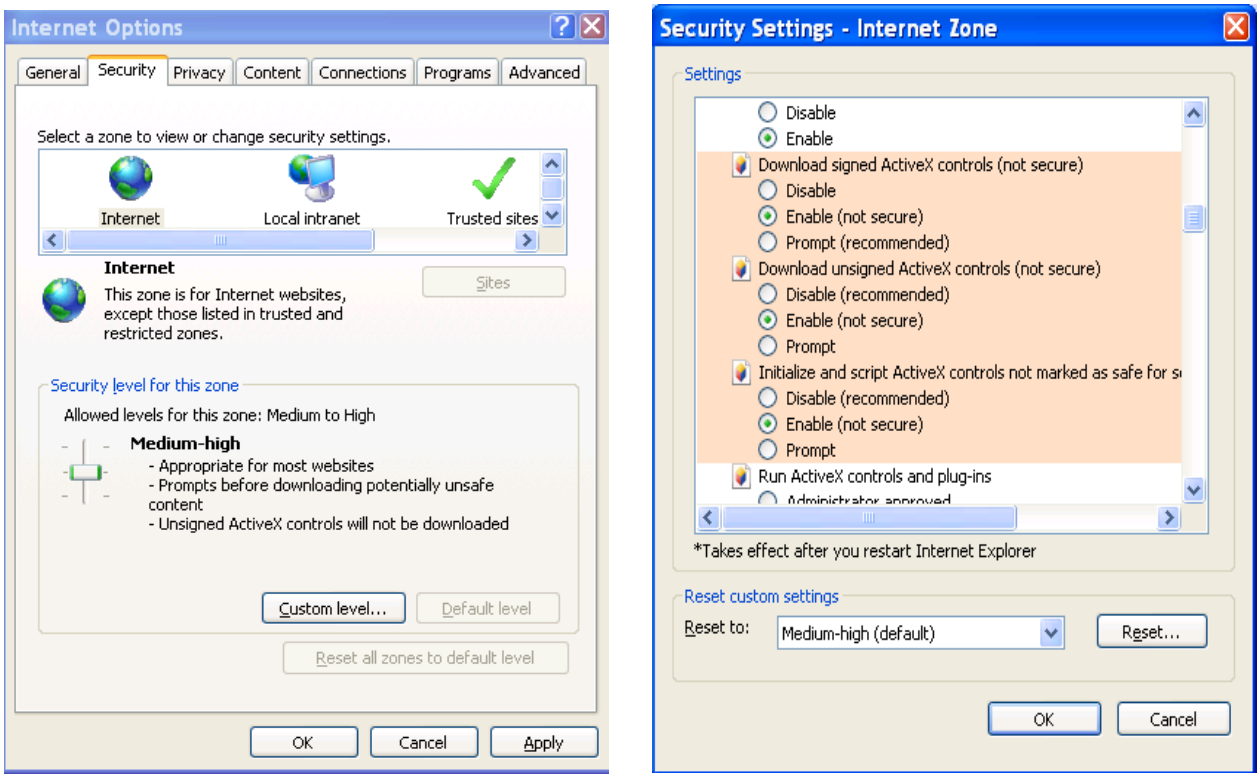

Figure 6-2

After installation, the interface is shown as below. See Figure 6-3.

Please input your user name and password.

Default factory name is admin and password is admin.

Note: For security reasons, please modify your password after you first login.

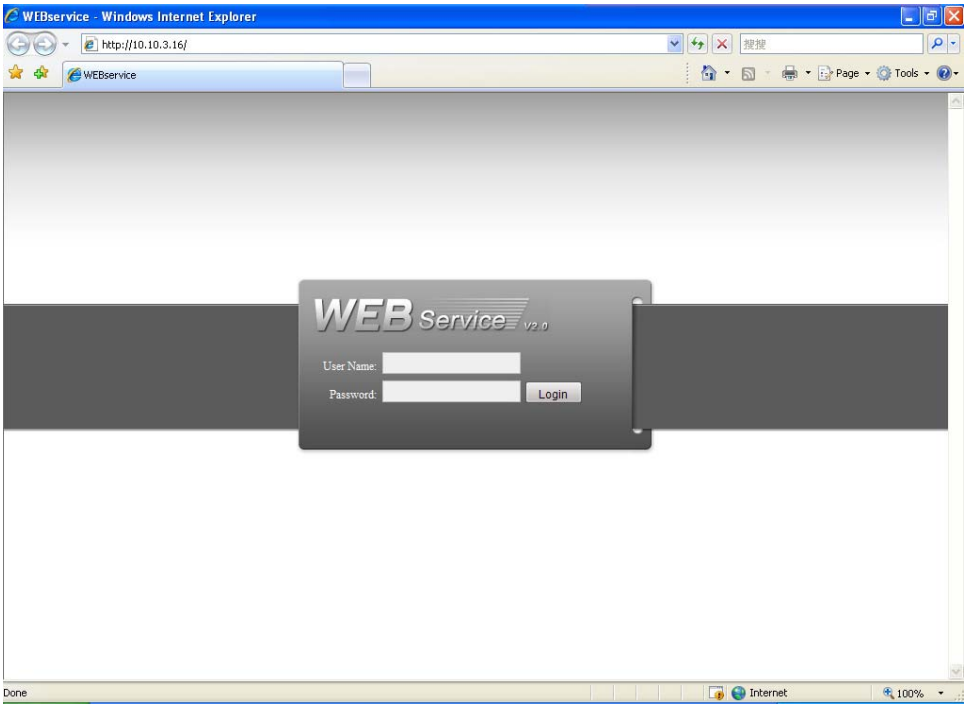

Figure 6-3

6.2 Main Interface

After you logged in, you can see the main interface. See Figure 6-4.

There are six sections:

- Section 1: Monitor channel menu tree
- Section 2: System menu
- Section 3: PTZ control
- Section 4: Color setup and other setup
- Section 5: Preview window
- Section 6: Monitor window switch

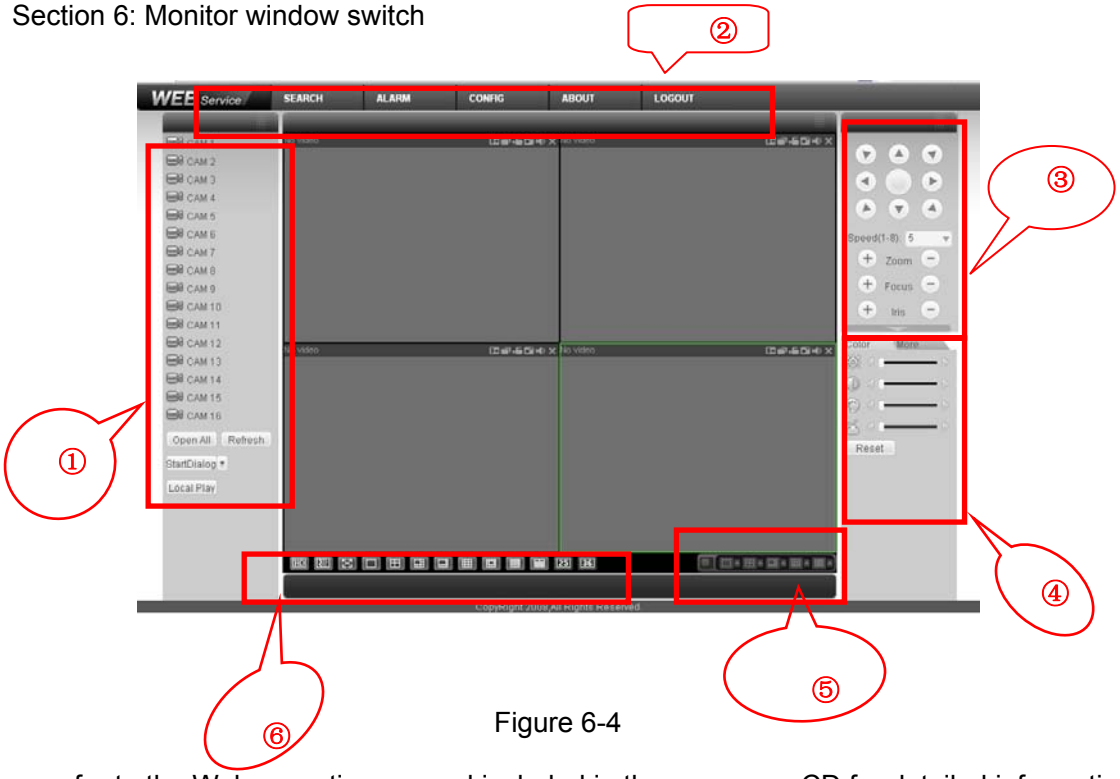

Figure 6-4

Please refer to the Web operation manual included in the resources CD for detailed information.

Note

- **This manual is for reference only. Slight difference may be found in the user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **Please visit our website or contact your local service engineer for more information.**